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PCT

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<p>(54) Title: PARTIAL PRINTING OF A SUBSTRATE</p> <div data-bbox="300 1129 1328 1373"></div> <p>(57) Abstract</p> <p>A partially printed substrate with a print pattern comprising a first colour deposited on the substrate and a second colour deposited on the first colour, the second colour being darker than the first colour, whereby the first and second colours are perceived as a combined substantially single colour in the area defined by the first colour.</p>		

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PARTIAL PRINTING OF A SUBSTRATE

This invention relates to the partial printing of a substrate with a plurality of layers, at least one layer being applied to the substrate with inexact registration in relation to another layer.

There are a number of visual and other functional benefits in printing only part of the surface area of a substrate. For example, it is common to partially print a substrate with one or more colours to reveal the substrate exposed to form part of the required design. Such methods may also be used in the printing of printed circuits, membrane switches and backlit display panels in which superimposed layers must be in exact registration or one layer must overlap another layer, for example to achieve an insulating layer over a conductive layer of ink.

White is the most common colour of substrate to be printed over part of its area and revealed in other parts, firstly because it is easiest to achieve the desired perceived colour of other colours if they are printed on white, especially if such colours are formed by transparent or translucent inks. Secondly, white forms a good contrast to many other colours and enables easily visible graphic designs. Thirdly, white commonly forms a significantly high percentage of many designs. Fourthly, the mass processing of white substrates provides economy and efficiency in production, by

PANEL WITH LIGHT PERMEABLE IMAGES

This invention relates to panels and more particularly light permeable panels that are partially imaged with at least one design that is also light permeable.

The term "light permeable" as used herein includes transparent materials, translucent materials and perforated materials. Transparent materials may have two parallel, plane surfaces or otherwise allow clarity of vision through the panel material, enabling the eye to focus on objects on the other side of the material and provide an undistorted image or may have at least one surface of the transparent material not plane and/or not parallel with another surface, such as to give a distorted image effect. Perforated materials have perforation holes which allow light permeability.

Partially imaged light permeable panels are already known in several fields and are typically used to control visibility of the panel, visibility of any image on one side of the panel, such as a graphic design, and visibility through the panel from one side to the other side, and vice versa.

The incorporation of an opaque pattern on or into particular types of light permeable panels, in order to create unidirectional vision, is already known, for